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Jerry Cairo

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EXAMINER

MULLEN, THOMAS J

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 05/21/2004

2

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/780,798

Applicant(s)

CAIRO ET AL.

Examiner

Thomas J. Mullen, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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1. The disclosure is objected to because of the following informalities:

p. 2, lines 7-8, under "Brief Description", Fig. 3 is described as "a block diagram of the device of FIG. 1 shown in a context of use", but all that is shown in Fig. 3 are the components of a "message" 28 (note, in contrast, that Fig. 2 is described at p. 3, last 2 lines, as a block diagram of PAD 10 "shown in a context of use");

p. 5, line 19, it appears that "destination telephone number 21" should be --destination telephone number 15-- (see Fig. 2);

p. 5, line 21, it appears that "destination telephone number 17" should be --destination telephone number 15-- (see Fig. 2); and

p. 6, line 4, it appears that "destination telephone number 17" should be --destination telephone number 15-- (see Fig. 2).

Appropriate correction is required.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "12" has been used to designate both a "monitoring and reporting unit" (see p. 3, line 8 of the specification) and "wireless transmitters" (see p. 3, line 16 of the specification); note the multiple occurrences of reference numeral 12 in Fig. 2, which apparently correspond to the different uses of this numeral in the specification.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 15, 22, 26 and 30 (all in Fig. 2; note paragraph 1 above regarding numeral 15).

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "voice recognition (means)" and "auxiliary pushbuttons" (claim 55) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 48-54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The disclosure fails to provide an enabling teaching for combining features of the "vital signs" monitoring embodiment with features of the "biometric reading" ("charge authorization") embodiment. Although Fig. 2 shows the personal alert device (PAD) 10 physically containing both the vital sign sensor(s) 14 and the acoustic transducer 27 (for a biometric reading), the only discussion of the biometric/charge authorization embodiment occurs at p. 8, lines 8-16, and does not mention combining the sensing of "vital signs" with the "biometric" sensing to produce some sort of composite result, for any reason. Thus, combining the features of these embodiments, as in claims 48-54--note e.g.,

"protecting the creditability", claim 48, line 1;
sensors for "at least some vital signs", claim 48, line 3;
communicating "if at least some of the vital signs exceed a threshold value", claim 48, last 2 lines;
monitoring "biometrics", claim 49, line 3; the provision that "payment can be made...for purchases", claim 49, last 3 lines;
etc.--

is not adequately taught in the disclosure so as to enable one skilled in the art to make and use the claimed invention.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 6-12, 19-25, 33-35, 38, 40, 42-43 and 45-56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6, lines 2-3, "the step of monitoring and calling for help" is indefinite, since "monitoring (a vital sign)" and "(automatically) calling for help" are actually two separately recited steps in claim 1, rather than a single step, i.e. it is unclear whether both, or merely one, of these steps is intended in claim 6.

Claim 7, last 2 lines, "transceiving a wireless message to a basestation" is vague, i.e. "transceiving" implies 2-way communication whereas "to a basestation" implies 1-way communication (i.e., from communication device 24 to base station 32 in Fig. 2). Likewise, in claims 8-12, "the step of transceiving the wireless message to the basestation" is vague.

Claim 9, last 2 lines, "a magnitude of current and past vital signs" is vague, i.e. it appears that "vital signs" should be --values--, --measurements--, etc.

Claim 9, last line, before "the monitored" should be inserted --of--.

Claim 12, line 4, "a authorized" should be --an authorized--.

Claim 19, lines 2-3, "the means for monitoring and calling for help" is indefinite, since "means for monitoring" and "means for...calling for help" are recited separately in claim 14, i.e. it is unclear whether both, or merely one, of these "means" is intended in claim 19.

Claim 20, last 2 lines, "means for transceiving a wireless message to a basestation" is vague, i.e. "transceiving" implies 2-way communication whereas "to a basestation" implies 1-way communication (i.e., from communication device 24 to base station 32 in Fig. 2). Likewise, in claims 21-25, "the means for transceiving the wireless message to the basestation" is vague.

Claims 33-34, line 2 in each claim, "communication" should be --communications-- (see claim 27, line 6).

Claim 38, line 3, after "the threshold" should be inserted --value-- (see the end of claim 1).

Claim 38, lines 3-4, "a historical average in memory" is indefinite as to what parameter's "average" is stored in the memory.

Claim 40, lines 2-3, "the step of monitoring the vital signs" lacks clear antecedent basis, in that only a single "vital sign" is recited in claim 39.

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Claim 40, lines 3-4, "measuring a combination of all vitals" is vague, in that: (i) only a single "vital sign" is recited in claim 39, (ii) it is unclear what is meant by "vitals", as opposed to "vital signs", and (iii) it is unclear how a combination of vital signs would be "measur(ed)" per se, or how individually measured vital signs would be combined to produce a meaningful composite result.

Claim 42, lines 2-3, "the step of monitoring and calling for help" is indefinite, since "monitoring (a vital sign)" and "(automatically) calling for help" are actually two separately recited steps in claim 39, rather than a single step, i.e. it is unclear whether both, or merely one, of these steps is intended in claim 42.

Claim 43, last 2 lines, "transceiving a wireless message to a basestation" is vague, i.e. "transceiving" implies 2-way communication whereas "to a basestation" implies 1-way communication (i.e., from communication device 24 to base station 32 in Fig. 2).

Claim 45, line 3, "at least some vital signs" is indefinite as to whether this phrase encompasses a single vital sign as well as plural vital signs, or just encompasses plural vital signs (note that "some" is generally defined as an "unspecified number or quantity", which presumably would include "one").

Claim 47, lines 3-4, "means for transceiving wireless messages" is vague as to whether 2-way communication (as implied by "transceiving") or 1-way communication (i.e., from communication device 24 to base station 32 in Fig. 2) is intended.

Claim 48, line 3, "at least some vital signs" is indefinite as to whether this phrase encompasses a single vital sign as well as plural vital signs, or just encompasses plural vital signs.

Claim 48, it is unclear if "a portable sensors [sic]" on line 4 refer to the same element(s) as the "sensors" on line 3.

Claim 48, it is unclear if "at least some of the vital signs" on the last 2 lines necessarily refers to all, or might just refer to a subset, of the "at least some vital signs" on line 3.

Claim 49, lines 4-5, "the biometric template" lacks antecedent basis.

Claim 49, lines 5-6, "payment can be made" is indefinite as to what entity is making the "payment".

Claim 49, last 2 lines, "transmission of authorizations" is indefinite as to where such "authorizations" are being "transmitted" to.

Claim 50, line 3, "the wireless transceiver" lacks clear antecedent basis.

Claim 51, line 3, "transmitting authorization codes" is indefinite as to where such codes are being "transmitt(ed)" from, and where they are being "transmitt(ed)" to.

Claim 51, line 4, "the users [sic] account" lacks antecedent basis.

Claim 51, line 5, "biometric vitals" is vague, in that (i) it is unclear what is meant by "vitals", as opposed to "vital signs", and (ii) as disclosed, "vital signs" and "biometrics" are separate parameters which are separately sensed, and it is unclear how they are to be combined as implied by this phrase.

Claim 51, last 2 lines, "the user records on file" lacks antecedent basis.

Claims 52-54, "The method...as in claim 48" (lines 1-2 in each claim) is indefinite, as claim 48 is an apparatus claim and not a method claim.

Claim 52, last 2 lines, "the set of records on file" lacks antecedent basis.

Claim 53, lines 4-5, "the user's account" lacks antecedent basis.

Claim 53, last 2 lines, "the user set of records on file" lacks antecedent basis.

Claim 54, line 3, after "the threshold" should be inserted --value-- (see the end of claim 48).

Claim 54, line 3, "a historical average" is indefinite as to what parameter's "average" is intended.

Claim 55, line 4, "the PAD" lacks antecedent basis.

Claim 55, line 4, "10" is indefinite as to whether or not a particular quantity of an element is being implicitly or explicitly recited (note that reference characters, if used in claims, should be placed in parentheses).

Claim 55, line 6, it is unclear what element "has" the stored recorded audio message; put another way, it is unclear how "having" defines a step of the overall method.

Claim 55, line 7, it is unclear what other element "connect(s)" to the monitoring station.

Claim 55, last 3 lines, each of the phrases "the monitoring station", "the base station" and "the desired location" lacks antecedent basis. Further with regard to "the desired location", it is unclear what characteristic(s) of such a location would cause it to be a "desired" location per se.

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Claim 56 is indefinite in that it cannot be determined if an independent claim or a dependent claim is being recited; i.e., "further comprising" (line 2) implies that a dependent claim is being recited, but there is no claim dependency recited prior to this phrase.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2, 6-8, 10, 12-15, 19-21, 23, 25-28, 32, 34-35, 39, 42-46, 48 and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Bornn et al (US 4827943).

Note in Bornn et al, sensor unit 10 (Fig. 1) and 234 (Figs. 8B and 9) comprising various "vital sign" sensors (12-22, 24 and 26 in Fig. 1; 236 in Fig. 8B; 254 in Figs. 9-10), the sensor unit being "portable" and "attached to and carried by an authorized user" (Fig. 2 and col. 4, line 65); base station 44 (Fig. 1) and 200 (Fig. 8B), communicatively coupled to the sensor unit by a radio link (note digital telemetry transmitter 40 (Fig. 1) or 240 (Fig. 8B) of the sensor unit, and telemetry receiver 42 (Fig. 1) or 204 (Fig. 8B) of the base station--col. 5, lines 48-52); and "diagnostics/alarm" unit 238 (Figs. 8B and 9) of the sensor unit 234, which "transmit(s) an alarm signal to the base station when the (user) is in need of assistance" (Abstract), i.e. when "an alarm condition exists in the parameters being monitored" (col. 11, lines 23-27), wherein diagnostics/alarm unit 238 has alarm condition detectors 250 (Figs. 9-11) for determining an "alarm condition" based on outputs from the various "vital sign" sensors in the manner defined e.g. at col. 10, lines 10-14, such as "when the parameters being monitored fall outside of a predetermined range". Notification to "caregivers" may take place locally, via audio alarm 208 (col. 10, lines 30-32); remotely, via telephone dialer 210 whereby "a paramedic...can be dialed up and provided with a prerecorded message as to the location, name of subject, and nature of the alarm" (col. 10, lines 32-37); or via pager transmitter 212 or carrier current transmitter 214 (col. 10, lines 38-46). Thus, when a monitored vital sign "exceeds a threshold value" (note "threshold level", col. 14, line 37), a radio frequency "channel" (e.g., the link between transmitter

40/240 and receiver 42/204) is used to "automatically call for help", as in claims 1, 14, 27, 39, 45 and 48. (Further as to claim 48, the term "creditability" on line 1 is not given patentable weight, as it occurs only in the preamble. MPEP 2111.02.)

Regarding claims 2, 15 and 28, among the various "vital sign" sensors (12-22, 24 and 26) disclosed by Bornn et al are ECG electrodes 20 and 22, used to measure the "heart rate" of the user (col. 5, lines 26-31); also, Bornn et al teaches that "additional physiological parameters" (other than those depicted by the sensor blocks in Fig. 1) may be monitored, see col. 5, lines 8-11.

Regarding claims 6, 19, 32, 42 and 46, as discussed above Bornn et al at least implicitly teaches comparing a monitored vital sign(s) with a respective "threshold value(s)" (note comparator 266, discussed at col. 12, lines 31-50 and col. 14, lines 28-40).

Regarding claims 7, 20 and 43, note "basestation" 44/200 discussed above (as to claim 43 in particular, it is inherent from the description in Bornn et al that the wireless message is sent to the base station 44/200 "without the user's participation").

Regarding claims 8, 10, 21 and 23, the messages sent to the base station 44/200 are "encoded", note encoders 27 and 36 in Fig. 1 and "alarm encoders" 252 in Fig. 9; in particular, the signals are in the form of a "coded digital word" which "includes the identity of the patient from which the signal originates" (see col. 11, lines 48-54), and is also "descriptive of the alarm condition" (col. 12, lines 58-60). In other words, the "encoded" message includes some form of "identifier of the monitored vital sign" and "identifier of the authorized user".

Regarding claims 12, 25 and 34, base station 44/200 discussed above is inherently an "authorized user" base station, and communication between the transmitter 40 and receiver 42 in Fig. 1 occurs over predetermined (or "selected") "channels", see col. 5, lines 38-57.

Regarding claims 13, 26, 35 and 44, telephone dialer 210 can provide for "dial(ing) up (a telephone number of a third party) and provid(ing them) with a prerecorded message", as discussed above (see col. 10, lines 32-37).

Regarding claim 55, Bornn et al further teaches providing a pushbutton-type actuator 28 or 246 on a housing accessible to the subject/user. Note in Fig. 1, block 28 described as a "nurse call switch" (col. 5, lines 7-8); note in Fig. 2, the element 28 on top of casing 100 (col. 6, lines 50-52); and note in Fig. 9, block 246 described as a "patient-activated alarm" (col. 12, lines 17-

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18). This feature in Bornn et al implicitly allows the subject/user to "call for help". Further, as discussed above Bornn et al teaches providing "a prerecorded message as to the location, name of subject, and nature of the alarm" to a third party; therefore, Bornn et al at least implicitly teaches using the actuator 28 or 246 to "call for help" by enabling an "audio message" to be played back, identifying the subject/user and his location.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3-5, 9, 11, 16-18, 22, 24, 29-31, 33, 37, 40-41, 47 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bornn et al, further in view of Teller et al (US 6605038, eff. date 6/23/00).

Regarding claims 3-5, 16-18, 29-31 and 41, as discussed above Bornn et al teaches that "additional physiological parameters" (other than those depicted by the sensor blocks in Fig. 1) may be monitored, see col. 5, lines 8-11. One skilled in the art would have recognized that "blood pressure", "galvanic skin resistance" and "body temperature" are well known and easily measured parameters of human health, and would have sought to use these parameters as needed with the system and method of Bornn et al. For example, Teller et al is from the same art area and discloses a sensor device 10 (note the physical embodiments of the device shown in Figs. 12-19) which "generates data indicative of various physiological parameters of an individual, such as the individual's heart rate,..., core body temperature,..., galvanic skin response or GSR,...,(and) blood pressure" (col. 4, lines 14-19). Therefore, in view of Teller et al it would have been obvious to use the parameters of "blood pressure", "galvanic skin resistance" and "body temperature" with the system and method of Bornn et al as needed (e.g., depending on the particular medical condition of a particular medical patient).

Regarding claims 9, 22 and 47, it is believed to be an inherent teaching in Teller et al that the "data" transmitted from sensor device 10 to various remote monitoring points (e.g. central

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monitoring unit 30, personal computer 35 and computer 65) includes the current and past "magnitudes" of the measured vital signs per se, note e.g. the various time-varying data displayed on the "web pages" in Figs. 5-11. Therefore, in view of Teller et al it would have been obvious to include vital sign magnitudes in the "data" transmitted by Bornn et al, in order to give a monitoring party a more specific idea of the severity of any alarm/emergency conditions associated with the subject/user.

Regarding claims 11, 24 and 33, as discussed above the sensor unit 10/234 of Bornn et al has a digital telemetry transmitter 40 (Fig. 1) or 240 (Fig. 8B) for sending data or signals to the telemetry receiver 42/204 of base station 44/200. At the time of the invention, it was well known in the art to use a "cellular" transmitter and receiver for such communication; for example, Teller et al teaches that wireless device 50 associated with the sensor device 10 may be "a 2-way pager or cellular phone" (col. 7, lines 49-52), in communication with a "base station" 55. Therefore, in view of Teller et al it would have been obvious to make the link between the digital telemetry transmitter 40 (Fig. 1) or 240 (Fig. 8B) and the telemetry receiver 42/204 of base station 44/200, in Bornn et al, a "cellular" link.

Regarding claim 37, Bornn et al further discloses a "range monitoring system" (note elements 230,232,248 in Figs. 8A-8B, and 248,314,316,318 in Fig. 9) which detects "whenever the subject being monitored moves outside the range of the base station" (Abstract, last 4 lines). At the time of the invention, it was well known in the art to provide such "location" monitoring using a "global positioning system", i.e. GPS; for example, Teller et al teaches that "sensor device 10 can generate data indicative of...the global positioning of the individual" (col. 6, lines 25-29). Therefore, in view of Teller et al it would have been obvious to monitor the location of the subject/user, in Bornn et al, with a "global positioning system".

Regarding claim 40, Teller et al further teaches that "derived data" and "analytical status data" is generated at the sensor device 10 and at a central monitoring unit 30, respectively, based on "at least one" of the measured parameters (see Abstract, lines 9-12; col. 1, lines 62-65; col. 5, lines 35-38; etc); note in particular Table 2 at cols. 5-6, where various conditions monitored by Teller et al are defined in terms of multiple sensor parameters. Therefore, in view of Teller et al it would have been obvious to "make a determination as to the welfare" of the subject/user in Bornn et al using a "combination" of vital signs.

Regarding claim 56, as discussed above Bornn et al disclose various communication links for sending a "call for help" to a remote point, i.e. using telephone dialer 210, pager transmitter 212 or carrier current transmitter 214 (col. 10, lines 32-46). At the time of the invention, it was well known in the art to communicate with a remote point via the Internet; for example, Teller et al teaches that communication between a subject/user (having sensor device 10) and a remote point may occur using the Internet, see Figs. 1 and 5-11; col. 3, line 62; col. 7, lines 13 and 59; etc. Therefore, in view of Teller et al it would have been obvious to provide such communication in Bornn et al using the Internet.

11. Claims 36 and 49-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bornn et al, further in view of Lopes (US 6169494).

Bornn et al (paragraph 8 above) fails to teach determining whether a given subject/user is "authorized" by using a "biometric template". However, the use of biometric templates for identification purposes is known in the art, e.g. as taught by Lopes; note in Lopes, "tracked unit" 100 in Fig. 1 carried or worn by a subject/user, having sensors 19,20 (e.g. heart rate, body temperature) for determining physiological conditions of a subject/user, such that a "substantially unique ID code" may be generated from a combination of the sensor outputs (see the Abstract and col. 2, lines 41-44), and optical scanner 30 for alternately determining a "unique physical characteristic" such as a fingerprint (col. 3, lines 17-23)). One skilled in the art would have recognized that a foolproof form of positive identification of the subject/user would be desirable in a remote medical monitoring system and method, such as taught by Bornn et al, so that the subject user cannot "substitute" someone else's measurements for his own, and/or to provide an enhanced way to properly distinguish one portable device from another, e.g. so as to not record one patient's data under another patient's name, etc. Therefore, in view of Lopes it would have been obvious to use a "biometric template" with the remote medical monitoring system and method of Bornn et al.

Further regarding claims 36 and 50, it would have been obvious to carry out appropriate measures such as an alarm notification ("call for help") or disablement/"turning off" of the portable subject/user device when the "biometric template" does not result in a positive

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identification of the intended subject/user, since one skilled in the art would have recognized the need to prevent unauthorized subjects/users from further use of the system.

Further regarding claims 49, 51 and 53, one skilled in the art would have recognized that such "foolproof form of positive identification" would have been useful for ensuring the integrity of financial transactions, such that: "payment can be made by transmission of authorizations for purchases"; that "authorization codes...will debit the users account at a point of purchase location"; and that "authorization encrypted codes...(will) provide charge authorizations to a seller that will debit the user's account for a purchase at a location", in the system of Bornn et al in view of Lopes, and therefore it would have been obvious to enable the subject/user (or some other person) to use the system in this manner.

Further regarding claim 52, Lopes further discloses a tracking/locating unit 200 for communicating with, and monitoring, the tracked unit 100, wherein tracking/locating unit 200 has a processor 203 and code memory 205 for storing a "biometric template" received from tracked unit 100; processor 203 implicitly compares the template stored in memory 205 with any further templates received from tracked unit 100, to enable the carrier of the tracking/locating unit 200 to verify the identity of the carrier of the tracked unit 100 via display 207 (see col. 5, lines 36-55); thus, Lopes implicitly teaches matching a "history" of the vital signs (i.e., the "further" templates received from tracked unit 100) with the "records on file" (i.e., with the biometric template stored in memory 205).

12. Claims 38 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bornn et al, further in view of Groff et al (US 6102856).

As discussed above, Bornn et al teaches determining an "alarm condition" based on outputs from the various "vital sign" sensors in the manner defined e.g. at col. 10, lines 10-14, such as "when the parameters being monitored fall outside of a predetermined range", but doesn't specify how such a "range" (or more particularly, "limit values" or "threshold values") would be determined. However, it is well known in the art of medical diagnostic measuring and signaling to base a set of limit or threshold values for a parameter on a "historical average" thereof, for a given subject/user; for example, Groff et al discloses a wearable vital sign monitoring system having a wearable unit 10 in communication with central facility 28, wherein processor 22 and

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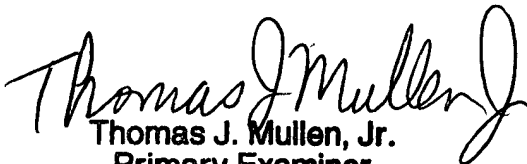
memory 24 of the unit 10 undergo a "learning" process (col. 3, lines 33-53) that involves "collecting...a few minutes' worth of data" (from various sensors 14,16,18,20), i.e. collecting a "history" of values for each monitored vital sign, to determine a "nominal range or pattern" for each vital sign to which subsequent values or patterns of each vital sign are compared. In view of Groff et al it would have been obvious to implement "limit values" or "threshold values" in Bornn et al based on a "historical average" of each vital sign, since one skilled in the art would have recognized that this provides, for a particular subject/user, a more reliable indication of a critical or dangerous value with respect to each vital sign.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Mullen, Jr. whose telephone number is 703-305-4382. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu, can be reached on (703) 308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

TJM


Thomas J. Mullen, Jr.
Primary Examiner
Art Unit 2632